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Application No.: 10/749,087  
Attorney Docket No.: 25401A

### REMARKS

Support for the above-requested amendments to claims 1 and 10 is found throughout the specification, such as, for example, in paragraphs [0024] and [0030] – [0033]. No question of new matter arises and entry of the amendments is respectfully requested.

Claims 1 – 19 are before the Examiner for consideration.

### Rejection Under 35 U.S.C. §102(b)

Claims 1, 5, 8 - 13, and 18 have been rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 4,711,685 to Hillman ("Hillman"). The Examiner asserts that Hillman teaches a decorative acoustic panel that has a main body with a first density and an edge section that has a second density as presently claimed.

In response to this rejection, Applicant respectfully directs the Examiner's attention to independent claims 1 and 10 and submits that claim 1 defines a decorative acoustic panel and claim 10 defines an acoustic panel that are not taught within Hillman. Hillman teaches a fabric-surfaced fiber board that has pressed and non-pressed portions. (*See, e.g.*, Abstract). A carpet fabric is laminated to a flat sheet of wood or mineral fiber board that includes a re-activatable binding agent. (*See, e.g.*, column 1, lines 31 – 34). The periphery of the laminate board is subjected to pressure between platens at a temperature high enough to vaporize the reactivating agent. (*See, e.g.*, column 1, lines 46 – 48). The volatilized re-activating agent softens the binding agent at the peripheral portion of the laminate while the pressure of the platens reforms and defines the periphery region. (*See, e.g.*, column 1, lines 48 – 51). The resulting product is a reveal edge of a ceiling board. (*See, e.g.*, column 1, line 52). Because of the densification of the edge of the board caused by the heat and applied pressure, the periphery of the product is stronger than a regular ceiling board. (*See, e.g.*, column 1, lines 53 – 56).

Applicant respectfully submits that Hillman does not teach (1) a decorative acoustic panel that includes a decorative surface, a main body formed of a first material having a first density, and at least one peripheral edge that is folded about a fold point such that the peripheral edge is flush against said main body, and where the peripheral edge is formed of the first material and has a second density that is greater than the first density (claim 1) or (2) an acoustic panel that includes a main body and a reinforcing edge on at least one side of the main body that is formed by compressing an adjacent outer region to form a compressed

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region that is rotated against said main body until said compressed region is flush against said main body, where the rotated compressed region forms the reinforcing edge (claim 10). Although Hillman teaches densifying a peripheral edge of the board (*see, e.g.*, column 1, lines 46 – 51), Hillman is silent with respect to any teaching of folding the peripheral (outer) edge of the board, as is required by amended claims 1 and 10.

In order for a reference to be anticipatory, each and every element of the claimed invention must be present within the four corners of the cited reference. Because Hillman does not teach an acoustic panel that has at least one peripheral edge folded about a fold point such that the peripheral edge is flush against the main body (claim 1) or a reinforcing edge on at least one side of a main body that is formed by compressing an adjacent outer region and rotating the compressed region against the main body until the compressed region is flush against the main body (claim 10), Applicant respectfully submits that Hillman is not an anticipatory reference. Therefore, Applicant submits that independent claims 1 and 10 are not anticipated by Hillman. With respect to dependent claims 5, 8, 9, 11 – 13, and 19, Applicant submits that because independent claim 1 is not taught within Hillman and claims 5, 8, and 9 are dependent upon independent claim 1 and contain the same elements as claim 1, dependent claims 5, 8, and 9 are also not taught by Hillman. Similarly, with respect to dependent claims 11 – 13 and 19, Applicant submits that because independent claim 10 is not taught within Hillman and claims 11 – 13 and 19 are dependent upon independent claim 10 and contain the same elements as claim 10, dependent claims 11 – 13 and 19 are also not taught by Hillman.

In view of the above, Applicant submits that the present invention is not anticipated by Hillman and respectfully requests that this rejection be reconsidered and withdrawn.

**Rejection Under 35 U.S.C. §103(a)**

Claims 2, 15 – 17, and 19 have been rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 4,711,685 to Hillman (“Hillman”) in view of U.S. Patent No. 5,823,611 to Daniel *et al.* (“Daniel”). The Examiner admits that Hillman fails to teach folding the edge portions of the acoustic panel. In this regard, Daniel is cited as assertedly teaching folding edge portions. The Examiner concludes that it would have been obvious to one of skill in the art to combine the teachings of Daniel with the teachings of Hillman to obtain a folded design as in the present invention.

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With respect to dependent claims 2, 15 – 17, and 19, Applicant submits that because independent claims 1 and 10 are not taught within Hillman (as discussed *supra*), and Daniel adds nothing to the deficiencies of Hillman (*i.e.*, an acoustic panel that has at least one peripheral edge folded about a fold point such that the peripheral edge is flush against the main body (claim 1) or a reinforcing edge on at least one side of a main body that is formed by compressing an adjacent outer region and rotating the compressed region against the main body until the compressed region is flush against the main body (claim 10)) and because claim 2 is dependent upon independent claim 1 and contains the same elements as claim 1 and claims 15 – 17 and 19 are dependent upon independent claim 10 and contains the same elements as claim 10, dependent claims 2, 15 – 17, and 19 are also not taught by Hillman and Daniel.

Notwithstanding the above, Applicant respectfully directs the Examiner's attention to independent claims 1 and 10 and submits that claim 1 defines a decorative acoustic panel and claim 10 defines an acoustic panel that are not taught within Hillman and/or Daniel. With respect to Hillman, Applicant submits that the acoustic board taught by Hillman is discussed in detail above, and for purposes of brevity, will not be discussed in detail with respect to this rejection. Daniel teaches a headliner that includes one or more integrally formed flaps that extend from an edge of the headliner and which are integrally hinged to the edge of the headliner to fold over the top of the headliner. (*See, e.g.*, Abstract and column 1, lines 46 – 53). In one embodiment of the invention, the flaps are compressed headliner material to provide a relatively thin but highly densified impact absorption padding. (*See, e.g.*, column 1, lines 56 – 59). A hinge is formed at the junction of the flap and the body of the headliner by compressing the linear area along the length of the flap at its junction with the headliner body to allow it to pivot in a certain direction. (*See, e.g.*, column 2, line 64 – column 3, line 1). The hinge forms a generally curvilinear “W” shaped structure with each section having a width of approximately 2 mm, a trough height of approximately 1 – 2 mm, and a hinge depth of approximately 1 – 2 mm. (*See, e.g.*, column 3, lines 52 – 58 and Figure 2).

Applicant respectfully submits that neither Hillman nor Daniel teach or suggest (1) a decorative acoustic panel that includes a decorative surface, a main body formed of a first material having a first density, and at least one peripheral edge that is folded about a fold point such that the peripheral edge is flush against the main body, and where the peripheral edge is formed of the first material and has a second density greater than the first density

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(claim 1) or (2) an acoustic panel that includes a main body and a reinforcing edge on at least one side of the main body that is formed by compressing an adjacent outer region to form a compressed region that is rotated against said main body until the compressed region is flush against the main body (claim 10). As discussed above, Hillman is silent with respect to teaching the folding of a compressed region. Daniel specifically teaches compressing the headliner material and folding the compressed regions into a "W" shape. Thus, the folded, compressed sections of the headliner of Daniel are not folded flush against the headliner body. In both independent claims 1 and 10, the compressed regions are folded flush against the main body. Such rotation of the compressed regions is neither taught nor suggested by either Hillman or Daniel.

In addition, Applicant submits that there is no motivation for one of skill in the art to arrive at the presently claimed invention based on the teachings of Hillman and Daniel. To establish a *prima facie* case of obviousness, there must be some motivation, either within the reference or in the knowledge of those of skill in the art, to modify the reference or combine the references' teachings, there must be a reasonable expectation of success, and the prior art references must meet all of the claim limitations. (See, e.g., *Manual of Patent Examining Procedure*, Patent Publishing, LLC, Eighth Ed., Rev. 3, August 2005, §2142). In particular, Applicant submits that one of ordinary skill in the art would not be motivated to arrive at the invention claimed in claim 1, namely a decorative acoustic panel that includes a decorative surface, a main body formed of a first material having a first density, and at least one peripheral edge that is folded about a fold point such that the peripheral edge is flush against said main body, and where the peripheral edge is formed of the first material and has a second density greater than the first density or the invention claimed in claim 10, i.e., an acoustic panel that includes a main body and a reinforcing edge on at least one side of the main body formed by compressing an adjacent outer region to form a compressed region that is rotated against the main body until the outer region is flush against the main body. As discussed above, neither Hillman nor Daniel teach or suggest folding a compressed region flush against a main body. In fact, Hillman does not mention any folding of a compressed region and Daniel teaches forming compressed regions into a "W" shape that is not flush against the main body of the headliner. Without some teaching or suggestion, there can be no motivation, and without motivation, there can be no *prima facie* case of obviousness. In

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addition, Applicant submits that, in view of the above, the combination of the teachings of Hillman and Daniel would not result in the inventions claimed in claims 1 and 10.

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In view of the above, Applicant submits that claims 2, 15 – 17, and 19 are non-obvious and patentable over the cited references and respectfully requests reconsideration and withdrawal of this rejection.

**Rejection Under 35 U.S.C. §103(a)**

Claims 3, 4, 6, and 7 have been rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 4,711,685 to Hillman ("Hillman") in view of U.S. Patent No. 6,756,332 to Sandoe *et al.* ("Sandoe"). The Examiner admits that Hillman does not teach the use of a thermoplastic material in the acoustic board. Sandoe is cited for assertedly teaching the use of bicomponent fibers in products. The Examiner concludes that it would have been obvious to one of skill in the art to combine the teachings of Hillman and Sandoe to provide bicomponent fibers in the article of Hillman.

With respect to dependent claims 3, 4, 6, and 7, Applicant submits that because independent claims 1 and 10 are not taught within Hillman (as discussed *supra*), and Sandoe adds nothing to the deficiencies of Hillman (*i.e.*, an acoustic panel that has at least one peripheral edge being folded about a fold point such that the peripheral edge is flush against the main body (claim 1) or a reinforcing edge on at least one side of the main body that is formed by compressing an adjacent outer region and rotating the compressed region against the main body until the compressed region is flush against the main body (claim 10)) and because claims 3, 4, 6, and 7 are dependent upon independent claim 1 and contain the same elements as claim 1, dependent claims 3, 4, 6, and 7 are also not taught by Hillman and Sandoe.

Notwithstanding the above, Applicant respectfully directs the Examiner's attention to independent claims 1 and 10 and submits that claim 1 defines a decorative acoustic panel and claim 10 defines an acoustic panel that are not taught within Hillman and/or Sandoe. With respect to Hillman, Applicant submits that the acoustical board taught by Hillman is discussed in detail above, and for purposes of brevity, will not be discussed in detail with respect to this rejection. Sandoe teaches a headliner made from a laminate that includes a core layer sandwiched between two stiffening layers to form an I-beam construction. (*See, e.g.*, Abstract, column 2, lines 41 – 45, and Figure 2). The core layer is formed of nonwoven

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thermoplastic fibers having a denier of 0.8 – 3.0 and other fibers with a denier of 4.0 – 15.0. (See, e.g., column 2, lines 45 – 49). The stiffening layers include nonwoven polymeric fibers. (See, e.g., column 2, lines 49 – 50). The laminate may also include first and second web adhesive layers positioned between each of the outer (stiffening) layers and the core layer. (See, e.g., column 2, lines 64 – 66). At least a portion of the core layer may include bicomponent fibers having a high melting point core and a low melting point sheath. (See, e.g., column 4, lines 40 – 44).

Applicant respectfully submits that neither Hillman nor Sandoe teach or suggest (1) a decorative acoustic panel that includes a decorative surface, a main body formed of a first material having a first density, and at least one peripheral edge that is folded about a fold point such that the peripheral edge is flush against the main body, and where the peripheral edge is formed of the first material and has a second density that is greater than the first density (claim 1) or (2) an acoustic panel that includes a main body and a reinforcing edge on at least one side of the main body that is formed by compressing an adjacent outer region to form a compressed region that is rotated against the main body until the compressed region is flush against the main body (claim 10). Both Hillman and Sandoe are silent with respect to teaching the folding of a compressed region. In both independent claims 1 and 10, the compressed regions of the acoustic panels are folded flush against the main body. Therefore, Applicant submits that Hillman and Sandoe do not teach or suggest the inventions claimed in amended claims 1 and 10.

In addition, Applicant submits that there is no motivation for one of skill in the art to arrive at the presently claimed inventions based on the teachings of Hillman and Sandoe. As discussed above, to establish a *prima facie* case of obviousness, there must be some motivation, either within the reference or in the knowledge of those of skill in the art, to modify the reference or combine the references' teachings, there must be a reasonable expectation of success, and the prior art references must meet all of the claim limitations. (See, e.g., *Manual of Patent Examining Procedure*, Patent Publishing, LLC, Eighth Ed., Rev. 3, August 2005, §2142). Applicant submits that one of ordinary skill in the art would not be motivated to arrive at the invention claimed in claim 1, namely a decorative acoustic panel that includes a decorative surface, a main body formed of a first material having a first density, and at least one peripheral edge that is folded about a fold point such that the peripheral edge is flush against the main body, and where the peripheral edge is formed of the

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first material and has a second density greater than the first density or the invention claimed in claim 10, *i.e.*, an acoustic panel that includes a main body and a reinforcing edge on at least one side of the main body formed by compressing an adjacent outer region to form a compressed region that is rotated against said main body until the compressed region is flush against the main body. As discussed above, neither Hillman nor Sandoe teach or suggest folding a compressed region. In fact, Hillman and Sandoe are completely silent with respect to any folding of the disclosed articles. Without some teaching or suggestion, there can be no motivation, and without motivation, there can be no *prima facie* case of obviousness. In addition, Applicant submits that, in view of the above, the combination of the teachings of Hillman and Sandoe would not result in the inventions claimed in amended claims 1 and 10.

In view of the above, Applicant submits that claims 3, 4, 6, and 7 are non-obvious and patentable over Hillman and Sandoe and respectfully requests reconsideration and withdrawal of this rejection.


#### CONCLUSION

In light of the above, Applicant believes that this application is now in condition for allowance and therefore requests favorable consideration.

If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

If necessary, the Commissioner is hereby authorized to charge payment or credit any overpayment to Deposit Account No. 50-0568 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.

Respectfully submitted,

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